Immediate Molar Implant Placement and The Anatomic Harmony Abutment; a case series

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Abstract

Background: The placement of immediate implants in the posterior sector is a widespread procedure where the success and survival rates are similar to those of traditional protocols. However, large extraction sockets are difficult to seal without mucoperiosteal flap reflection, an implant preparation sequence that considerably deviates from typical manufacturer protocols, crestal socket morphology not amenable to standard healing abutment placement and the possibility of high occlusal forces with inadvertent function when a provisional implant is planned.

Aim/Hypothesis: The purpose of this case series are to assess related technique that will allow chairside manufacturing of custom healing abutments as also called the anatomic healing abutment for immediate molar placement.

Fig 1: Preoperative view

Fig 2: Initial x-ray

Fig 3: After atraumatic extraction

Fig 4: Hybrid dental implant placement

Methods and Materials

A 55-year-old nonsmoking male patient, with no systemic condition and a 42 year female healthy with no significant medical history patient had lost her lower first molars due to nonrestorable extensive decay. According to clinical and radiographic examination on the patient detecting decayed remaining roots in molar tooth and performed an extensive restoration presenting deep, subgingival distal decay on tooth. So that, we decided to extract related tooth and then perform immediate implant placement. After minimally traumatic tooth extractions, the alveolus was carefully cleaned and washed surgically with a saline solution, and dental implants (IRES SAGL, Switzerland) was placed in the center of the interradicular bone, in a type A position according to the Tarnow classification. After then a temporary abutment was fabricated utilizing flowable composite, which adapted to the socket architecture, to serve as a customized healing screw. It is called the anatomic or customised healing abutment. This technique preserves the anatomic emergence form with sutureless implant site sealing and improves the predictability of final restoration fabrication and delivery. After 8 weeks of the Osseo integrated period, the custom healing screw served successfully as a tooth profile for peri-implant tissue.

Conclusion

Implants may be placed in ideal restorative positions at the time of mandibular molar extraction. With the anatomic harmony abutment technique, the soft tissues upon maturation closely resemble the natural root contour, which allows for the generation of esthetic and functional implant-supported restorations. 5.

Results

Uneventful healing was observed during this time period in these cases. It is important to note that the initial contour appeared to have been maintained. The anatomic harmony abutment ultimately allows for more predictable final restorations by providing the dental laboratory a restorative profile, thus idealizing the final restoration. The soft tissue margin was stable and the esthetic appearance of the implant site was well maintained and with no clinical signs of peri-implant inflammation and bleeding on probing.

Fig 5: X-ray after insertion

Fig 6: The anatomic harmony abutment

Fig 7: After 2 weeks

Fig 8: Periimplant mucosa

Fig 9: Implant stability quotient #46 : 77 isq

Fig 10: The CAD CAM screw retained restoration

Fig 11: X-ray after restoration

Fig 12: Final clinic

References

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